

Title (en)

Nuclear reactor containment vessel and water leak detection floor

Title (de)

Kernreaktor-Sicherheitscontainer und Wasserleck-Erkennungsboden

Title (fr)

Enceinte de confinement de réacteur nucléaire et plancher de détection de fuites d'eau

Publication

**EP 2602793 B1 20140430 (EN)**

Application

**EP 13001159 A 20081211**

Priority

- JP 2007321293 A 20071212
- EP 08859424 A 20081211

Abstract (en)

[origin: EP2228802A1] If a molten core holding apparatus (core catcher) is disposed below a reactor pressure vessel in a reactor containment vessel, water leak cannot be detected at a pedestal floor. Thus the reactor containment vessel has to be separately equipped with a mechanism for detecting the water leak. A water leak detection floor (11) transversally suspended by a pedestal side wall (22) is installed between a reactor pressure vessel (1) and a molten core holding apparatus (10). If a water leak occurs at the reactor pressure vessel (1), the water leak detection floor receives and detects the leak water. In a core meltdown accident, corium melts and penetrates the water leak detection floor and deposits on the molten core holding apparatus.

IPC 8 full level

**G21C 9/016** (2006.01); **G21C 17/00** (2006.01); **G21C 17/04** (2006.01)

CPC (source: EP US)

**G21C 9/016** (2013.01 - EP US); **G21C 17/002** (2013.01 - EP US); **G21C 17/04** (2013.01 - EP US); **Y02E 30/30** (2013.01 - EP US)

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